CONFLICT DETECTION AND RESOLUTION
IN ASSOCIATION WITH DATA ALLOCATION

ABSTRACT OF THE DISCLOSURE

A method for detecting and resolving conflicts in association with a data allocation includes determining a relationship between each of a plurality of positions in a hierarchical organization of data. The method also includes selecting a position i

5 and determining a total weight of position i. If the total weight of position i is effectively non-zero, the method further includes removing the influence of position i from the other positions and adding position i to a set of conflict-free positions. Alternatively, if the total weight of position i is effectively zero, the method includes selecting a position k with which position i has a relationship, reintroducing the effect

10 of position k on the other positions if k is already in the conflict-free set, removing position k from the conflict-free set if k is already in the conflict-free set, removing the influence of position i from the other positions if i is not the selected position, and adding position i to the conflict-free set if i is not the selected position. The method also includes successively repeating the method for each position, with each

15 successive position becoming position i.